DOCUMENT RESUME

ED 283 280 EA 019 502

AUTHOR Carr, John C.
TITLE Effects of Structural Complexity on Administrative Role Demands.
PUB DATE Apr 87
NOTE 14p.; Paper presented at the Annual Meeting of the American Educational Research Association (Washington, DC, April 20-24, 1987).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Administrator Responsibility; Administrator Role; Comparative Analysis; Elementary Secondary Education; *Instructional Leadership; Leadership Responsibility; *Organizational Theories; *Principals; Research Needs; Rural Schools; School Districts; *School District Size; School Size; State Surveys; *Superintendents; Time Management
IDENTIFIERS *Maine

ABSTRACT

This report of a 1986 survey conducted in Maine addresses the relationship between stated time use demands on principals and superintendents and the structural complexity of the organizations in which they work. Researchers, comparing single with multiple schools and districts of supervisory responsibility, mailed the Maine Administrative Competency Survey to all principals and superintendents and received a response of 61 percent and 66 percent, respectively. Although multiunit superintendents reported more time spent supervising and evaluating personnel than did single-unit superintendents, rural multidistrict superintendents have fewer opportunities to delegate evaluative functions. Similarities in time use are more striking than dissimilarities; additional structural components require study to develop recommendations. More differences (but fewer than assumed) occurred between principal groups. Compared to multischool principals, single school principals spend more time supervising and evaluating personnel, preparing class schedules, and attending activities. Predictably, single school principals spend less time traveling. Findings indicate more similarities than differences in time use among single- and multiunit administrators, which may reflect job conditions necessities over structural factors. Multiple supervisory and reporting functions for administrators are rural realities in Maine. Further study should determine the influence of these considerations on leadership effectiveness. Survey results are appended. (CJH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED283280

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it

☐ Minor changes have been made to improve reproduction quality

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

John C. Carr

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

EFFECTS OF STRUCTURAL COMPLEXITY ON ADMINISTRATIVE ROLE DEMANDS

Symposium: "Politics and Rationality in Defining Administrator Certification: The Maine Case"

American Educational Research Association
1987 Annual Meeting

John C. Carr

University of Maine
College of Education

April, 1987

EA 019 502

BEST COPY AVAILABLE

Introduction

This paper addresses the relationship between time use demands on superintendents and principals with single unit responsibility and those with multi-unit responsibility. Data were generated from the Maine Administrative Compentency Survey (Estler and Carr, 1986) administered to all public school administrators in the state. Maine has several organizational configurations including the typical organizational structure of one formal leader to each unit--superintendent to district, and principal to school--as well as executives with multiple unit administrative and reporting responsibilities, one superintendent working with six independent school districts, each with its own school board, budget, staff, etc. It is assumed that multiple unit responsibilities and reporting functions may create different time demands on administrators than single unit situations. While it is generally recognized that chief educational administrators have considerable autonomy in time use, a five district superintendent with ten school board meetings each month with preparation demands for each may indeed be more rigidly constrained vis-a-vis time use, than a superintendent who has only one school board meeting per month. Parallel time requirements may confront those principals who supervise more than one school. Such demands could have certification and training implications for administrators. Specifically, how does one prepare to meet the challenges of instructional leadership in the face of overwhelming logistical considerations?

Purpose

The purpose of this paper is to determine what relationship, if any, exists between stated time use of principals and superintendents, and the structural complexity of the organizations in which they work. Robbins (1983)

views structural complexity in organizations as comprised of three interrelated but discrete components: vertical differentiation--the number of hierarchical layers; horizontal differentiation--the breadth of control, and spatial dispersion--the number of district organizational sub-units distributed geographically. Hall, Johnson and Haas (1967) include physical facilities, distance from organizational headquarters, degree of personnel dispersion, and the location of personnel in their definition of spatial dispersion. For the purpose of this paper, structural complexity is defined in terms of the number of distinct units for which a principal or superintendent is administratively responsible, in this case, the number of schools for which an individual principal has supervisory responsibility, and the number of school districts for which a superintendent has supervisory responsibility. Thus, the specific research questions are as follows:

1. Is there a difference in reported time use between superintendents with single district responsibility and superintendents with multi-district responsibility?

2. Is there a difference in reported time use between principals with single school responsibility and principals with multi-school responsibility?

Method

These questions were explored through survey data solicited in a mailing to all principals and superintendents in Maine in the spring of 1986. As described previously in this symposium, the survey was designed to provide information for rules making regarding administrative certification in the state. This specific study includes all full time public school principals responding whose supervisory responsibilites included any configuration of grade levels, kindergarten through grade nine. High school principals were omitted from analysis because, while most were principals of single facilities, the departmental nature of high schools may confound the issue of

structural complexity. All superintendents who responded were included. Approximately sixty-one percent of all principals and sixty-six percent of all superinten-

dents in the state of Maine responded. Responses of persons with single unit responsibility were compared with those of persons indicating responsibility for two or more units, whether schools if principals or districts if superintendents.

Administrators were asked to indicate the relative amount of time spent on forty-one tasks commonly associated with administrative functioning. These tasks are listed in Table 1. A forced choice process was used where the continuum of task descriptions included: "Not part of my job," "rarely," "occasionally," "frequently," and "routinely." These possible responses were assigned values of 0 to 4 respectively. Analysis of variance was used to compare the mean responses of superintendents and elementary principals with single unit responsibility with those of persons with responsibility for two or more units. Table 1 indicates the statements, means, standard deviations and significance levels of responding superintendents and principals with single unit responsibility contrasted with those having multi-unit responsibility.

Results

Superintendents

As indicated in Table 1, there were four of forty-one mean responses showing statistically significant differences in time use reported between superintendents with single district responsibility and those with multi-district responsibility. In three statements regarding supervision and evaluation of personnel, respondents as a group supervised and evaluated

teachers, other professional staff members (excluding administrators), and non-professional personnel rarely to occasionally. In all three instances, however, multi-unit superintendents indicated more time spent supervising and evaluating personnel than single-unit superintendents. This may be attributable to the fact that most multi-unit superintendencies are comprised of small rural districts with few administrative layers. Frequently principals in these districts are full-time teachers and by state certification rules not permitted to conduct personnel evaluation. It is conceivable, therefore, that multi-district superintendents have fewer opportunities to delegate evaluative functions than do many single district superintendents.

The activity of coordinating and supervising transportation, also performed more frequently by multi-district superintendents may be attributable to the absence of support personnel in this area, but similarly the focus on transportation makes sense when one considers the rural nature of the state. There may be hundreds of square miles and more than one carrier involved in pupil transportation within a single superintendent's range of responsibility. The complexity of multiple units and multiple carriers could contribute to the greater time use related to transportation indicated by multi-unit superintendents. Indeed, the concept of having a single superintendent for multiple districts is an organizational adaptation to a rural problem, and is most likely to occur where the population is too sparse to call for a single district.

The similarities in time use between the two sets of superintendents are far more striking than the few dissimilarities (indeed, few more than could be attributable to change alone). Further analyses involving other components of structural complexity, such as number of students in each unit, and number of

available administrative support personnel may determine differentiated areas of role demands among superintendents which this study did not identify. It would be particularly helpful to determine if multiple supervision and reporting functions adversely affected areas of time demand identified with instructional leadership behaviors. If this could be accomplished, model organizational configurations might be developed which serve to encourage instructional leadership activities among rural superintendents.

Principals

As indicated in Table 1, more differences occurred between principal groups than were found with superintendents, but fewer than might have been assumed. Altogether, eight items elicited significantly different responses between the two principal groups.

One of the eight areas dealt with amount of time spent visiting schools. Single school principals visited schools rarely or not at all while multi-school principals visited schools on a slightly more frequent basis. This result makes sense. A principal responsible for a single school would logically need to spend less time traveling than a principal with multiple schools each demanding a portion of his or her time. (Some principals chose not to answer this item, apparently because of confusion over the description: "district level administrator." Therefore, the item cannot be considered truly significant.)

Significant differences occured in two areas of supervision and evaluation. One of these areas dealt with the supervision and evaluation of professional staff other than teachers and administrators. Single school principals performed this function close to frequently; multi-school principals, occasionally or even less than occasionally. While single school principals did not spend quite as much time supervising and evaluating non-

professional staff, they did spend more time in this area than did multi-school principals. These findings are the reverse of what was found with superintendents of corresponding units. Perhaps many of the multi-school principals are "supervisory" principals who evaluate only the teaching principals of the schools in their jurisdiction.

The preparation of required reports also involved a significant difference. Single school principals spent more time preparing required reports than did multi-school principals. It is, on average, a frequent activity for multi-school principals, a more than frequent activity for single school principals.

Another task on which single school principals spent more time than did their multi-school counterparts was that of preparing class schedules. Responses indicate that single school principals were frequently engaged in preparing class schedules; multi-school principals, somewhat more than occasionally. This finding is not unexpected. Single school principals, because they are able to limit their focus to one school, would probably be more directly involved in the details of running that school.

Single school principals described their attendance at student functions and activities as frequent; multi-school principals as midway between occasional and frequent. When a principal's identity is tied to one school, concern both for that school and for administrative visibility are likely to be more concentrated than they would be for principals of more than one school. In addition, schedule conflicts between and among buildings are not a problem for single school principals as they may be for principals of multiple schools.

Likewise, the supervision of extra-curricular activities was an occasional activity for single-school principals; a rare activity for multi-school

principals. Explanations for this difference parallel those given for attendance at school functions.

A final and predictable difference: single school principals spent less time traveling than did multi-school principals. The difference based on survey response was occasional travel for single school principals, frequent travel for multi-school principals. This is a common observation and a common concern of multi-school principals. Their days are spent dividing time among units. They are either at a school, or "in between." Travel is a role expectation, but during travel time, a principal is neither administering nor leading.

Summary and Conclusions

In light of these findings, it appears that there are many more similarities in time use by single and multi-unit school administrators than there are differences. For the most part these findings, both similarities and differences, might be predictable as reflections of job conditions. It is possible that pressures of role expectations, such as bureaucratic expectations and social/political necessities carry more emphasis than do the structural factors examined in this study.

Multiple supervisory and reporting functions for school administrators are rural realities in Maine. Further study needs to be undertaken to determine if indeed these considerations constrain the administrator, or might possibly be utilized to enhance the leadership effectiveness of the role.

Bibliography

Estler, S. and Carr, J. (1986). Maine Administrative Competency Survey. Maine Department of Educational and Cultural Services: Kennebec Valley Collaborative.

Hall, R.; Haas, H. J.; and Johnson, J. (1967). **Organizational Size, Complexity, and Formalization.** American Sociological Review, pp. 905-912.

Hallinger, P. and Murphy, J. (1982). **The Superintendent's Role in Promoting Instructional Leadership.** Administrator's Notebook, 30(1982): 1-4.

Robbins, S. P. (1983). **Organization Theory: The Structure & Design of Organizations.** Englewood Cliffs, N.J.: Prentice Hall.

Scott, W. R. (1981). **Organizations: Rational, Natural, and Open Systems.** Englewood Cliffs, N.J.: Prentice Hall.

TABLE 1

SURVEY STATEMENTS RELATED TO ADMINISTRATIVE TIME USAGE

Key
0=Not applicable
1=Rarely
2=Occasionally
3=Frequently
4=Routine *P<.05

			Principals		Superintendents	
			Single School N=121	Multiple Schools N=38	Single District N=57	Multiple Districts N=28
1.	attending regular school board meetings and/or meetings with board sub-groups and/or individual school board members.	$\bar{x}$	3.30	3.50	3.98	4.00
		SD	.95	.80	.13	.00
2.	attending school-community meetings other than school board e.g., advisory meetings, advocacy groups and so forth	$\bar{x}$	2.55	2.55	3.11	3.14
		SD	1.05	1.06	.79	.76
3.	meeting with teachers individually and/or in groups	$\bar{x}$	3.79	3.79	2.98	3.04
		SD	.52	.41	.89	.92
4.	meeting with administrators tors individually and/or in groups	$\bar{x}$	3.39	3.37	3.81	3.68
		SD	.90	.88	.44	.55
5.	teaching or covering classes	$\bar{x}$	1.48	1.71	.35	.57
		SD	.70	.80	.48	.74
6.	meeting with individual students (counseling, handling discipline, etc.)	$\bar{x}$	3.47	3.39	1.00	1.29
		SD	.71	.68	.89	.85
7.	caring for health needs of students	$\bar{x}$	2.02	.97	.68	.64
		SD	1.82	.87	1.05	.78
8.	meeting with individual parents	$\bar{x}$	3.04	2.95	2.09	1.96
		SD	.78	.77	.76	.58
9.	meeting with parent groups (PTA, advocacy clubs, etc.)	$\bar{x}$	2.60	2.74	2.04	1.96
		SD	1.22	1.25	.78	.43
10.	developing and/or implementing a school-community relations program	$\bar{x}$	2.09	2.34	2.65	2.46
		SD	1.16	1.21	1.03	.74
11.	developing and articulating goals (professional program and/or system goals)	$\bar{x}$	2.77	2.66	3.32	3.14
		SD	.98	1.07	.69	.65

TABLE 1 (Continued)

SURVEY STATEMENTS RELATED TO ADMINISTRATIVE TIME USAGE

Key
0=Not applicable
1=Rarely
2=Occasionally
3=Frequently
4=Routine *P<.05

			Principals		Superintendents	
			Single School N=21	Multiple Schools N=38	Single District N=57	Multiple Districts N=28
12.	managing the office, coordinating work with office staff	$\bar{x}$	3.48	3.18	3.67	3.68
		SD	.90	.95	.74	.67
13.	clerical work (correspondence, ordering supplies, record-keeping, etc.)	$\bar{x}$	2.84	2.58	1.72	1.71
		SD	1.07	1.15	1.40	1.38
14.	visiting classrooms (if a school level administration)	$\bar{x}$	3.28	3.29	1.33	1.80
		SD	.79	.77	1.14	1.22
15.	visiting schools (if district level administration)	$\bar{x}$	.72	1.21*	2.88	2.89
		SD	.93	1.50	.85	.88
16.	supervising and evaluating administrators	$\bar{x}$	.24	.53	3.53	3.46
		SD	.73	1.34	.68	.69
17.	supervising and evaluating teachers	$\bar{x}$	3.46	3.45	1.42	1.89*
		SD	.81	.72	.91	1.03
18.	supervising and evaluating professional staff other than teachers and administrators (e.g. counselors, speech therapists)	$\bar{x}$	2.78	2.26*	1.46	2.00*
		SD	1.21	1.30	1.17	1.15
19.	supervising and evaluating non-professional personnel (e.g., cafeteria, custodial staff)	$\bar{x}$	2.52	1.84*	1.25	1.79*
		SD	1.26	1.37	.95	1.20
20.	mediating staff/personnel problems or concerns	$\bar{x}$	2.67	2.42	2.58	2.71
		SD	1.05	.95	.94	.98
21.	preparing required reports	$\bar{x}$	3.34	3.03*	3.72	3.71
		SD	.73	.88	.53	.71
22.	gathering information	$\bar{x}$	3.21	3.14	3.70	3.68
		SD	.78	.79	.50	.61

TABLE 1 (Continued)

SURVEY STATEMENTS RELATED TO ADMINISTRATIVE TIME USAGE

Key
0=Not Applicable
1=Rarely
2=Occasionally
3=Frequently
4=Routine *P∠.05

			Principals		Superintendents	
			Single School N=121	Multiple Schools N=38	Single District N=57	Multiple Districts N=28
23.	preparing class schedules	$\bar{x}$	2.97	2.32*	.09	.07
		SD	1.20	1.42	.34	.27
24.	supervising non-curricular student activities such as school cafeteria, bus loading and unloading, and school ground activity	$\bar{x}$	2.56	2.18	.11	.25
		SD	1.24	1.11	.45	.52
25.	attending student functions and activities	$\bar{x}$	3.18	2.55*	2.61	2.25
		SD	.97	1.08	.94	.89
26.	activities related to contract negotiations	$\bar{x}$	1.08	1.30	3.63	3.43
		SD	1.11	1.05	.62	.63
27.	activities involved with grievances, litigation, etc.	$\bar{x}$	1.03	.92	2.70	2.32
		SD	.81	.76	1.21	1.19
28.	facilities planning and/or plant maintenance	$\bar{x}$	2.64	2.47	2.98	3.25
		SD	1.18	.95	1.08	.75
29.	coordinating and supervising transportation	$\bar{x}$	1.35	1.05	1.60	2.25*
		SD	1.32	1.05	1.24	1.21
30.	activities related to curriculum planning and development	$\bar{x}$	3.21	3.13	2.93	2.93
		SD	.86	.81	.70	.81
31.	planning and preparing budget and/or proposals for funding	$\bar{x}$	3.60	3.42	3.86	3.86
		SD	.65	.89	.35	.36
32.	implementing and monitoring budget	$\bar{x}$	3.62	3.32	3.77	3.82
		SD	.80	1.07	.68	.39
33.	planning and/or conducting professional staff development activities	$\bar{x}$	2.73	2.84	2.68	2.86
		SD	1.01	.97	.93	.89

TABLE 1 (Continued)

SURVEY STATEMENTS RELATED TO ADMINISTRATIVE TIME USAGE

Key
0=Not applicable
1=Rarely
2=Occasionally
3=Frequently
4=Routine *P<.05

			Principals		Superintendents	
			Single School N=121	Multiple Schools N=38	Single District N=57	Multiple Districts N=28
34.	monitoring/evaluating special state, federal or district programs	$\bar{x}$	1.82	1.84	2.65	2.96
		SD	1.32	1.14	1.11	.79
35.	supervising extracurricular activities	$\bar{x}$	1.77	1.16*	.12	.39
		SD	1.40	1.12	.57	.87
36.	personal professional development (e.g., formal study; attending conferences, workshops, staff development sessions; professional reading)	$\bar{x}$	2.84	2.95	2.91	2.86
		SD	.89	.90	.95	.89
37.	any telephone time not included in preceding activities (e.g., time spent coordinating program with other administrators, talking with parents)	$\bar{x}$	3.18	2.95	2.96	3.04
		SD	.80	1.01	.81	.96
38.	travel time (time spent on work-related travel such as among school buildings, various offices and/or district and state meetings)	$\bar{x}$	2.01	3.05*	3.00	3.18
		SD	1.15	1.01	1.02	.67
39.	recruiting and hiring professional staff	$\bar{x}$	3.06	3.00	3.49	3.39
		SD	1.09	1.01	.73	.69
40.	recruiting and hiring other than professional staff	$\bar{x}$	2.48	2.53	2.58	2.61
		SD	1.35	1.11	1.39	1.26
41.	state meetings and/or professional organizations	$\bar{x}$	2.53	2.45	3.19	3.21
		SD	1.00	1.08	.79	.69